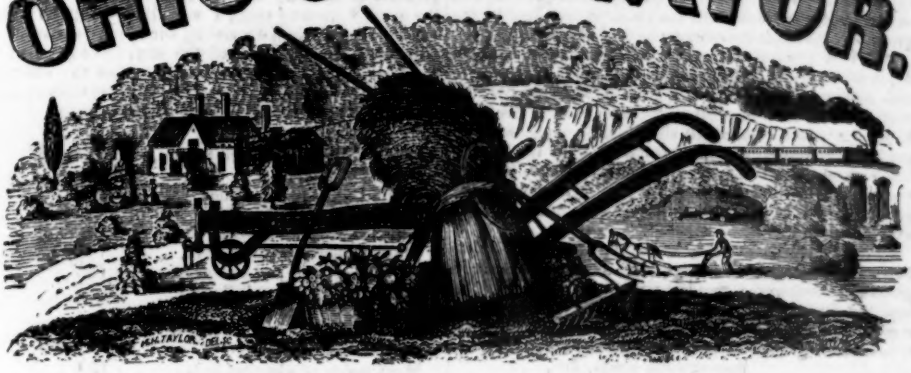
OHIO CULTIVATOR.



Devoted to Agriculture, Horticulture and Domestic Economy.

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Address M. B. BATEHAM, Columbus, O.

Agricultural Fairs in Ohio, 1849.

Medina county,	at	Medina, Sept. 26th and 27th.
Clinton	"	Wilmington, Oct. 17, 18 and 19th.
Trumbull	"	Warren, Sept. 25, 26 and 27th.
Ross	"	Chillicothe, Oct. 5th and 6th.
Licking	"	Newark, Oct. 3d and 4th.
Portage	"	Ravenna, Sept. 26 and 27th.
Mahoning	"	Canfield, Oct. 2d and 3d.
Geauga	"	Burton, Sept. 19th and 20th.
Ashtabula	"	Jefferson, Sept. 13th.
Delaware	"	Delaware, Oct. 2d and 3d.
Clermont	"	Batavia, Sept. 25th.
Knox	"	Mt. Vernon, Oct. 23 and 24.
Jefferson	"	Smithfield, Oct. 19.
Muskingum	"	Zanesville, Sept 20 and 21st.
Union	"	Marysville Oct. 25th.
Lorain	"	Elyria. Oct. 3d and 4th.
Miami	"	Troy, Oct. 13th.
Clark and Madison	"	London, Oct. 3d and 4th.

Letter from Tuscarawas County.

The Wheat Crop—Important facts about the Rust, &c.

Near New Philadelphia, August, 1849.

Mr. Bateham—Our wheat crop was not more than one-third of an average yield. Some fields were good, others in spots, and some scarcely worth harvesting. I had wheat in the plains and river bottoms; my plain ground was fallowed and put in the usual way, in good order, about the 20th of September; the land was well manured, and about 250 head of sheep were fed in the field the winter previous; where the sheep lay most, or where the manure was thickest, the straw was to all appearance heavy enough to produce 30 bushels per acre, but the grain so light that it did not pay for harvesting. In other parts of the same field, where the ground was not so rich and the straw light, the berry was plump, and to all appearance struck with rust alike. One of my neighbors had a field adjoining, of the same kind of soil, but new, (the first crop) and seeded at the same time mine was, which was extra good, although as to rust on the straw, I could see no difference from mine. The straw in my field where the wheat was most shriveled, was heavier than the straw in the new ground. In the river bottom, where the straw was rank or stood thick on the ground, the grain was shriveled and worthless, except for feed for cattle. Where the straw was light, the grain was tolerable good. An adjoining field, on new ground, not as well put in, was good; the straw not any heavier than the heaviest of the old ground. Another field on the side of a hill where the sun did not shine after four o'clock in the afternoon, and the ground full of small flat sand stones, the grain was well filled; and in the same field, where there were none of these stones, but more of clay soil, the wheat was scarcely worth cutting.

I observed other fields similar to those. Now, why this difference in quality? Every person I ask, says, Oh, the *rust* is the cause; but then ask, why this difference in the same field, and in fields adjoining, all in bloom the same time? "The rust, the rust,"—no doubt the rust was one cause, but there must be something else connected therewith. My opinion is, that our old ground having been plowed for a number of years, and perhaps

never deeper than five or six inches, and being plowed always about the same depth the ground becomes hard below the ground loosened by the plow, and the weather being very dry, by the time the grain was in bloom, all the moisture was evaporated from the loose ground, and consequently not sufficient moisture to circulate to the grain to counteract the extreme heat of the sun.

The new ground cannot be so hard below the usual depth of the plow, consequently the moisture is greater and sufficient to reach the wheat, notwithstanding the rust. I will admit the rust might have been so heavy as to kill the plant, or prevent all circulation necessary to produce the kernel; but this I think was not the case, as I have seen wheat struck much harder with rust some years ago. In the field where the small stones were, the ground no doubt was loosened under the plow as it went over the stones.

If my theory is correct, would not the *subsoil plow* have remedied the evil alluded to? If ever the subsoil plow was necessary, it was last year. I have never seen one, but I am about making one. How I shall succeed is perhaps uncertain. I will, however, have something to loosen the ground deeper than the common plow.

Respectfully yours, &c.,

J. Overholt.

ABSTRACT OF THE

METEOROLOGICAL REGISTER,

Kept at Woodward College, Cincinnati.

Lat. 39 deg. 6 minutes N.; Long. 84 deg. 27 minutes W.

150 *feet above Low Water Mark in the Ohio.*

BY JOSEPH RAY, M. D.

June, 1849.

Day of M.	Fahr'heit. Therm'ter			Barom	Wind.			Weather	Clearness of sky	Rain.
	Min.	Max.	Mean Tem.	Mean hight.	A. M	P. M	Force			
1	57	87	71.2	29.189	s w	s w	3	var'ble	5	.36
2	64	82	71.8	.135	do	do	1	var'ble	5	
3	65	86	72.7	.145	do	do	1	fair	7	
4	63	9	74.8	.175	w	west	1	fair	7	
5	62	86	73.0	.253	do	do	2	fair	6	
6	64	83	72.8	.208	n e	n e	1	var'ble	2	.07
7	69	86	76.0	.011	w	w	1	do	1	.08
8	70	82	73.2	.107	s w	n w	1	do	1	1.06
9	64	74	67.3	.085	n	n	1	do	1	.11
10	62	79	69.2	.268	do	do	1	do	5	
11	63	83	71.3	.264	e	e	1	cloudy	0	
12	67	82	73.0	.212	s w	s w	2	var'ble	1	
13	69	86	73.8	.309	s	s	2	do	1	
14	70	88	77.0	.389	s w	s w	1	do	1	.35
15	68	81	70.8	.276	w	west	2	do	2	
16	61	78	67.8	.400	n w	n w	1	fair	7	
17	26	78	68.3	.464	do	do	1	do	9	
18	60	37	73.3	.505	e	e	1	do	9	
19	64	88	75.2	.443	s	s	1	do	8	
20	67	92	78.2	.429	do	do	1	do	9	
21	70	91	79.0	.388	do	do	1	do	9	
22	70	92	79.8	.288	do	do	1	do	8	
23	73	90	79.7	.245	s w	s w	1	var'ble	5	.34
24	71	88	77.0	.155	do	do	1	var'ble	2	.14
25	71	84	75.7	.183	do	do	1	var'ble	1	
26	73	86	78.2	.125	do	do	2	fair	6	
27	72	39	74.2	.179	do	do	1	var'ble	2	.43
28	71	82	75.0	.145	do	do	1	do	2	.52
29	70	79	73.2	.145	west	west	3	do	2	1.34
30	70	84	74.3	.145	n w	n w	1	do	1	.10

Explanation.—The first column contains the day of the month; the second the minimum or least height of the thermometer, during the twenty-four hours beginning with the dawn of each day; the third the maximum or greatest height during the same period; the fourth the mean or average temperature of the day, reckoning from sunrise to sunrise; the fifth the mean height of the barometer, corrected for capillarity, and reduced to the temperature of freezing water. In estimating the force of the wind, 0 denotes calm, 1 a gentle breeze, 2 a strong breeze, 3 light wind, 4 a strong wind, and 5 a storm. In estimating the clearness of the sky, 10 denotes entire clearness, or that which is nearly so, and the other figure, from 0 to 10, the corresponding proportions of clearness. The other columns need no explanation.

Summary—

Least height of the thermometer,	57 deg.
Greatest height of do	92
Monthly range of do	35
Least daily variation of do	9
Greatest daily variation of do	30
Mean temperature of month,	73.9
do do at sunrise,	66.7
do do at 2 P. M.	84.6
Coldest day June 9.	
Mean temperature of coldest day,	67.3
Warmest day, of June 22.	
Mean temp. of warmest day,	79.8
Minimum height of Barometer,	29.011 inches.
Maximum do do	29.505 do
Range of do	.494 do
Mean height of do	29.241 do
No. of days of rain, 17.	
Perpendicular depth of rain, 4.90 in.	

Weather.—Clear and fair, eleven days; variable 18 days—cloudy 1 day.

Wind.—N. 2 days; N. E. 1 day; E. 1½ days; S. 5½ days; S. W. 12 days; W. 5 days; N. W. 3 days.

Memoranda.—1st, heavy shower; 3d to 6th, warm, fair and variable; 6th to 10th, wet, variable and showery; 10th to 14th, a light sprinkle of rain each day; 14th thunderstorm at midnight; 15th to 19th, pleasant and fair; 19th to 24th, dry, sultry and variable; 24th to 25th, variable and showery; 27th to 30th, warm and wet.

Observations.—This month has been remarkable for its high mean temperature, and for the great number of days on which there was more or less rain. On several days, however, the amount of rain was too small to be appreciated in the gauge. From the 24th to the close of the month, the average mean temperature was about 75½ degrees, while the atmosphere was almost constantly saturated with moisture. It can scarcely be doubted that this condition of the atmosphere extended the influence and increased the fatality of the epidemic.

Letter from Dr. Hildreth.

The Weather in June, and the Rust on Wheat, &c.

Marrietta, August 18, 1849.

Mr. Bateham—*Dear Sir.*—In answer to your inquiries as to the weather in June, and the rust on wheat, it was as follows:

The mean temperature for the month was 71 deg. 33 min. The greatest heat not over 90 deg—lowest 52 deg. Amount of rain four inches and five-twelfths. The wind on 26 days was from the southerly quarter. There was thunder with the rain at 5 periods. Barometer ranged from 29.20 inches to 29.65—about the usual height for summer.

On the morning of the 15th, at 2 o'clock A. M., a tremendous storm of electric fluid passed over this region, continuing for more than an hour to discharge an uninterrupted stream of lightning, accompanied with terrific peals of thunder. Several trees were struck and houses damaged in the town. There fell two inches of rain, attended with little or no wind. The weather for a few days following was cool. The temperature on the morning of the 17th, was at 52 deg.—at 2 P. M. of the 16th at 70deg.—the 18th was warmer, and with the

two following days at 84 deg. The 21st, it was at 89 deg.—22d 88 deg.—23d 87 deg. At 2 P. M. that day. rain with thunder—fell half an inch—the 24th, at 2 P. M. temp. at 76 deg., on the 20th in the rays of the sun, Therm. at 121 deg.

The air, from the 15th to the 25th of the month, was excessively humid; causing free perspiration from the least exercise of the body.

As to the rust, so destructive to the grain crop, the the Hon. W. R. Putnam, one of our most observant farmers, noticed the rust on his field of wheat on the 22d of June. On the 25th he cut a part of the crop, which was on high ground, and a portion he left to ripen more fully, the grain now being in the milk, and so soft as to mash easily with the fingers. This portion shrunk much in drying. The remainder, although equally rusty stood until the 2d of July, filled out well and was good grain. The color of the smut on the stalks was that of a bright iron rust, and so abundant that a cloud of dust rose from the wheat as it fell under the strokes of the cradler, covering the garments of the workmen with a red powder, as if colored by a dye. Mr. Putnam observed the same red fungus or parisite, on the earth in the field, and also in his garden. The leaves of the blackberry bushes, were affected like the wheat. A field of 25 acres of rye, used in the winter and spring as pasture for his sheep, was similarly attacked and suffered more than the wheat, as the rust attacked the naked ends of the kernels, as well as the stalks, destroying the whole crop.

Very few fields in the county, escaped the epidemic, reducing the yield to less than a third of a crop.

Grapes suffered from mould excessively at the same time or a little earlier, especially the Catawba, the Isabella being with us more hardy.

The potatoe crop, where not injured by the drouth in July, is very fine and free of "the rot," the tubers being more ripe and mealy, than for several years past.

A warm damp atmosphere, with hot scalding sunshine at intervals, when wheat is in the milk, or approaching that state, is almost certain to produce the rust in southern Ohio—showing that we are too far south for a healthy wheat crop.

Respectfully yours,
S. P. Hildreth.

Remarks.—In the vicinity of Columbus, the rust first attacked the wheat about the 15th to the 18th of June, and spread rapidly during the five or six days of remarkably warm weather, when the atmosphere was filled with moisture the whole time, without much if any rain.

In the last number of our paper, p. 260, our friend, Levi Heald, states that the rust made its appearance on the wheat in his vicinity during the cool weather preceding the 15th of June; hence we must not hastily conclude that the hot weather alone—or the heat and moisture combined was the cause of the malady.—Ed.

Wheat Rust and the Weather.

Mr. Bateham.—I notice much said in the Cultivator in regard to failure of the wheat crop by rust, &c., and many inquiries respecting varieties of wheat that are supposed to escape the malady. Now it is a question, whether any variety of wheat will be found to escape the *rust* or the effects of *extreme heat*, if either of these evils occur at the time the grain is in a green and milky state. If the grain or berry is so far advanced as to be in a stiff doughey state before the rust or extreme heat occurs, the crop will be but little injured; but if sown late, or from any cause the crop is backward, or if the rust or heat occur early in the season, so as to find the grain in the milky state, the result must be, shriveled wheat.

I would advise farmers who have a good variety of wheat, that they have tested and found adapted to their lands, to stick to that variety, notwithstanding an occasional failure. Sow early, rather than late—manure, lime and clover your land, and rest it occasionally with grass and summer fallow, and your wheat will seldom be injured with rust. But no precaution of the farmer can protect his wheat crop from the injurious effects of extreme hot weather when it occurs for three or more days in succession, just as the grain is forming and in a milky state. I remember that in 1828 we had four days of extreme hot weather, the 25, 26, 27 and 28th of June; so hot that it killed the wheat stalks just below the head, before the grain was out of the milk, thereby stopping the flow of the sap which was needed to fill out the grain, and a vast amount of shrivelled wheat was the consequence throughout the country. No rust was found on the wheat that season; the weather was too dry and hot to produce rust. I was engaged in milling business that season and purchased a large amount of wheat weighing from 56 to 60 pounds to the bushel. The lightest in weight offered me weighed only 46 pounds, and light as it was the farmers used it for seed, and it produced a good crop the following season.

The heaviest and best wheat I saw that season weighed 63 pounds to the bushel; and on inquiring of the grower he informed me, that owing to wet weather in the fall, he was prevented from sowing until January, and his crop was so backward as not to be fully headed out when that extreme hot weather occurred in June.

The wheat crop suffered great injury in this (Jefferson) county, the past season; first by the severe winter; next by extreme heat in June, and lastly by the rust.

Respectfully yours, &c.,
Robert Sherrard.

Sugar Hill farm, Near Steubenville, O., 1849.

Tobacco Culture in Montgomery County

Mr. Bateham—For the information of your numerous readers, I will give you some account of our tobacco growing, in the neighborhood of Carrollton, seven miles south of Dayton on the Miami river. We raise a considerable amount of the "weed" here, for which we get from three to six cents per pound "all round" as we term it, which is making an average price of the good and ground leaves. We raise from ten to sixteen hundred pounds to the acre. It is mostly shipped east, and used entirely for making cigars.

I have an eight acre lot, seven and a half acres of which I had in tobacco last year; on the balance (half an acre) I raised an abundance of watermelons and sweet potatoes for our family, besides a quantity of Irish potatoes and turnips The tobacco, five acres of it was set on the tenth of July, the balance a short time before.—I had off it 10,281 pounds of tobacco, which I sold at five cents per pound, all round, making the neat sum of $514 05. Well, in the fall, I sowed the whole of the ground (eight acres) in wheat, and harvested it on the 3d of July last; so you see that I put out, growed, and cut two crops on the same ground in less than one year.—My wheat was the most promising prospect I ever saw, previous to harvesting. I think, had it filled as wheat sometimes does, I should have had forty bushels to the acre; but in consequence of injury done it by the rust, I will not probably have more than twenty-five bushels to the acre, although it is less injured than any smooth wheat in our neighborhood. If it yields twenty-five bushels to the acre, it will make two hundred bushels, and that at the selling price here for new wheat, which is now 75 cents, would make $150, added to the $514 05 would make $664 05 for the two crops, which I consider something a little unusual. I have, however, nine acres of land adjoining the eight I have spoken of, which was in tobacco in 1847; six acres of which I put out myself, and raised 9,566 pounds of tobacco, for which I got 5¾ cents per pound, making the sum of $550 04 off six acres. My brother-in-law had the other three acres out, and his tobacco amounted to some $250, making in

all off the nine acres, some eight hundred dollars. Well, sir, strange as it may appear some of my neighbors who have been growing tobacco the same two years, have been so unsuccessful that they have quit the business. Probably I may give you something more on the tobacco subject hereafter.

I should have mentioned that the nine acres above alluded to, I have put in tobacco this year, and the prospect is fine.

Yours respectfully,
James McGrew.

Carrollton, Montgomery county, Ohio, July 8, 1849.

Remarks.—If friend McGrew had stated the amount of labor expended, or the *cost* of growing and securing his tobacco crops, his communication would have been more valuable and satisfactory. We hope he will think of this next time he writes. It will be news to many of our readers to learn that tobacco is extensively and profitably raised on bottom lands in the Miami valley.—Ed.

Letter from Samuel Williams.

Wheat Culture—Scientific Farming—N. Y. Wheat Crop—Tile Draining—The State Fair, &c.

Waterloo, New York, Aug. 23d, 1849.

M. B. Bateham—I have read with much interest your remarks on the management of land for the wheat crop. As Ohio is now the greatest wheat growing State, so is the Ohio Cultivator more exclusively devoted to the detail of all that pertains to the proper culture of wheat, to its diseases, and to the nature of the insects which attack it, than almost any other agricultural paper in the land. This is as it should be; and may your faithfulness in the great cause of the greatest earthly calling, be appreciated by the farmers of the wheat growing west as it should be, by every intelligent farmer who can read and think, who is neither too shiftless, stingy, or too full of his own wisdom, to subscribe to the Ohio Cultivator.

The report of your Washington county committee on farms, is full of the best practical instruction to the farmer; let every practical man "read, learn, mark and inwardly digest" each line of comment and advice therein contained. But if there is any trade or calling in this land, at this time, in which practice is below theory, it is in farming. I am daily in the habit of questioning farmers in relation to their mode of farming, and I must say in almost every instance their practice falls short of their theory; as even those who do not *take the paper*, contrive to get a tolerable theory from those who do both read and practice well. Yet there is now and then an impracticable *sri disant* farmer, whose theory if carried out, would defy the aid of practical science to perfect a crop. Here is a man who says that had he not manured his corn with stable dung this season, he might have saved his crop; but that the hot dry weather helped the manure to dry it up. Now science and practice will both agree that stable manure plowed in deep, and thoroughly mixed with the soil, will in its water forming decomposing process, enable the crop to bear the drouth, better than the unmanured soil. This man had plowed his corn field but once, the coarse manure was half on top the ground when his corn was planted, the result is, that in default of a little more labor and attention, much labor, capital, and more than half a crop is lost. But as there is no error without its palliations, this man very happily charges all his misfortunes to the untowardness of the season.

As I said before, with few exceptions, the theory of farmers is better than their practice, "the spirit is willing but the flesh is weak." There is not one farmer in ten, but will confess that he works more land than he can work well, having a large breadth to cover, he prepares his soil and puts in his seed indifferently, and trusts to Providence to give him a crop. He now lives in hope, very much like the man who buys a ticket in a lottery.

It would seem that farming is now about to come in for its full share of the improvement of the age. The application of science to agriculture by the analyzation and discovery of the efficient manure almost ceases to be a desideratum, when the magic effect of under draining is under debate. Dr. Baldwin of Virginia, as if impatient of every other theory by which the farmers may be aided, insists that *shade* alone is the great fertilizing agent of the soil. As no one of those theories or discoveries is incompatible with the free use of the other, that farmer must gain, who to a judicious extent, follows them all.

The wheat crop of western New York, is above the average, the yellow worm or C. tritici, has in some places diminished the yield; but I notice that our best farmers complain the least of the ravages of insects, winter-killing, &c. &c.; *prima facie* evidence, that well timed judicious manuring and tillage overcomes all. Hay is also a large crop. Oats and barley an average. Potatoes nothing, owing not to disease, but to long protracted drought. Indian corn when planted on old sward, or highly manured and well tended, will give an average crop; but in spite of the generally improved culture, the crop must be short this year. Slovenly as Indian corn was cultured here twenty years ago, the crop this season would have been nothing.

Under draining with the tile is doing wonders for every one who tries the experiment. John Johnston, whose great farm management you noticed in your last Cultivator, has already received from Mr. Whartenby, the master tile maker here, about 40,000 two and a half inch tile, more than 3000 rods; his tile machine was imported from England by the enterprising president of our Agricultural Society, John Delafield. It is worked by two men, and makes daily about 1500 tile fourteen inches long; they are afterwards dried and baked, the current price at the kiln is ten dollars per thousand. Last spring several gentlemen called to see Mr. Johnston's farm; he purposely omitted to tell them which wheat field was underdrained, and the better to elicit their surprise, he led them over one field where the wet heavy soil adhered to their boots much to their annoyance; then crossing the fence to another wheat field of like soil and formation, they one and all uttered their surprise at its dry and mellow surface; gentlemen exclaimed, Mr. J. "you are on my tile." They are laid from twenty to thirty inches deep, a little straw is placed over the joints as they are covered; although the edges of the tile are laid on the bottom of the ditch, experience proves that they sink no deeper into the soil. Soil thus drained possess a sort of capillary attraction, and power to retain a due equilibrium of moisture, during the most trying drought.

The great State Fair at Syracuse is to come off with so many interesting accessories, that a very great attendance is anticipated; to crown all, if not to give a dramatic character to the grand rural festival. Fanny Kemble Butler is noticed as one of the *dramatis personæ*, to be there not as a pretending representation of Flora, but as a great *artiste*, doubtless conscious of her power either to eclipse, or to be something more than Flora.

Very truly yours,
Samuel Williams.

Do King Birds Eat Working Bees?—The king bird has been regarded as one of the greatest enemies of the apiarian, in some situations, from the fact that it is a devourer of bees. Wilson, the ornithologist, suggested that the bird only picked out the drones, and never injured the working bees. Other close observers have come to the same conclusion. One writer states that to test the matter, he killed a number of the birds, and though he found many drones in their crops, he could find no working bees in them.—*Am. Ag.*

"Let your conversation be without malice or envy.

Price of Genesee Flour in New York.

The following table giving the average price of Genesee Flouer in New York for a series of years, may be found useful for reference. For the past six months the figures are for the medium grades of Genesee:

Years.	Jan.	Feb.	March	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1824	$6 25	$6 00	$6 12½	$6 25	$6 50	$6 25	$5 87½	$5 50	$5 25	$5 62½	$5 62½	$5 87½
1825	5 25	5 37½	5 25	5 25	5 12½	5 12½	5 25	5 00	5 12	5 25	5 12½	5 12½
1826	5 25	5 12½	5 25	5 87½	4 62½	4 87½	4 75	4 50	4 62	4 87½	5 12½	5 12½
1827	5 12½	6 00	5 50	5 75	5 12½	4 75	4 50	4 62½	4 68	4 75	5 25	5 62½
1828	5 25	5 12½	5 00	4 75	4 62½	4 56¼	4 12½	5 00	5 75	6 25	7 62½	7 37½
1829	8 37½	8 50	8 12½	7 25	6 25	6 75	5 87½	5 37½	5 50	5 75	5 31¼	5 37½
1830	5 12½	4 75	4 62½	4 75	4 87½	4 87½	4 87½	5 00	5 62	5 37½	5 25	5 18¾
1831	5 75	6 12½	6 75	6 87½	6 00	5 50	5 37½	5 1[illegible]	5 25	5 62½	5 75	6 00
1832	6 37½	6 50	5 62½	5 12½	5 37½	5 62½	5 75	6 00	5 87½	5 87½	6 00	6 37½
1833	6 00	5 75	5 50	5 75	5 62½	5 75	5 87½	5 62½	5 75	5 50	5 68¾	5 62½
1834	5 00	5 37½	5 12½	4 87½	4 75	4 81¼	4 87½	5 00	5 25	5 25	5 12½	4 87½
1835	5 12½	5 25	5 50	5 62½	5 75	6 12½	6 62½	6 50	5 75	5 93¾	6 25	7 50
1836	7 25	7 50	7 37	7 50	6 75	7 12½	7 12½	7 00	7 75	8 50	9 50	10 00
1837	10 12½	11 00	11 25	10 75	9 00	9 50	9 75	9 50	9 62	8 25	8 50	9 00
1838	8 75	8 25	8 00	8 25	7 50	7 75	7 25	7 12½	7 62	8 62½	8 50	8 62½
1839	8 87½	8 93¾	9 00	8 50	7 75	6 87½	6 31¼	6 59	6 75	6 13¾	6 87½	6 25½
1840	5 87½	6 37½	5 75	5 62½	5 12½	4 75	4 62½	5 00	5 00	4 87½	5 00	4 62½
1841	4 93¾	4 87½	4 75	4 93¾	4 81¼	5 00	4 37½	5 87½	6 50	6 25	6 00	6 37
1842	5 87½	6 43¾	6 12½	6 25	5 87½	6 12½	5 93¾	5 81¼	4 93	4 50	4 25	4 87½
1843	4 56¼	4 37½	5 75	5 62½	5 00	5 12½	5 72½	5 00	4 81	5 56¼	4 75	4 62½
7844	4 62½	4 81¼	4 93¾	4 90¼	4 62½	4 62½	4 31¼	4 31¼	4 18	4 37½	4 87½	4 68¾
1845	4 68¾	4 84¾	4 81¼	4 75	4 62½	4 50	4 62½	4 31¼	4 75	4 87½	6 25	6 87½
1846	5 75	5 62½	5 50	5 43¾	5 68¾	4 34¾	4 12½	4 18¾	4 18	5 6[illegible]	6 00	5 41¼
1847	6 50	6 87½	7 12	7 68¾	7 25	9 50	6 50	5 62½	5 75	5 75	6 56	6 18
1848	6 00	6 00	6 25	6 50	6 12½	5 50	5 18	5 0[illegible]	6 00	5 68¾	5 31¼	5 50
1849	6 00	6 0[illegible]	6 00	5 75	4 81	4 62						

The highest price was in March, 1837.....$11 25
The lowest " July, 1846.....4 12
The highest average price was in 1837.....9 68
The lowest " " 1844.....4 61

The monthly average for the whole period is as follows:

January.....$6 12 May.....5 81 September.....$5 75
February.....6 24 June.....5 86 October.....5 84
March.....6 21 July.....5 71 November.....6 06
April.....6 22 August.....5 75 December.....6 16

The average price of flour for the whole 26 years, has been $5 97.—*Buf. Com.*

Choice Sheep in Wayne County.

DALTON, OHIO, Aug. 21, 1849.

MR. EDITOR—Since I last wrote you, I have been introducing some very superior, thorough bred Saxon sheep into this State. In the spring of 1847, I corresponded with, and received samples of wool from Stephen Sibly, of New Hampshire, and Samuel Whitman, of Connecticut, and a number of other celebrated wool growers in the east, with a view of purchasing fine sheep. In the fall, I took a tour east, and purchased from the flocks of the following gentlemen, making choice selections without reserve, (excepting two of Mr. Scovilles late importation,) Stephen Sibly, N. H.; Samuel Whitman, George Tuttle, S. C. Scoville, Conn.; Samuel F. Church, Silas B. Crocker, N. Y. Mr. Sibly certifies that he sold me of the stock of which he was awarded a Gold Medal by the American Institute, N Y., for the finest American wool. Mr. Whitman certifies that he sold me one full blooded hornless Saxon buck, of first quality, as good as can be found in his region, also a lot of ewes of like quality. He has for several years been awarded the first premiums for the best Saxon sheep at Hartford, Connecticut. Mr. Scoville certifies that he sold me one imported ewe lamb from Saxony, and five others that were bred from the best flocks from Saxony. Mr. Church certifies that he sold me three of his best Saxon ewes. He has taken the first prize at the State Fair of New York, for two years. Mr. Crocker certifies that he sold me three Saxon ewes of the choicest kind, and that they are of the premium ewes of the State of New York.—He has taken premiums at the State and county Fairs for several years. Mr. Tuttle certifies that he sold me two pure blooded Saxon ewes, finest of the fine. The above certificates are in my possession, and can be seen at any time. These sheep have proved hardy, and look remarkably well. My buck from Mr. Sibly, (whose dam gave one of the fleeces that drew the Gold Medal) proves extraordinary vigorous, having served eighty-six ewes in one week, for the late Thomas Noble. His lambs partake much of the vigor and symetry of their size.

Gentlemen interested in the growing of superior Saxon wool, are respectfully invited to call and examine the stock.

THOMAS REED.

Long Wooled Sheep in Indiana.

MR. BATEHAM—In looking over the last Cultivator, I noticed an inquiry made in reference to Cotswolds and other long wooled sheep. The inquirer asks if it is true, that they will weigh from 200 to 250 pounds each? I have no experience in raising Cotswold sheep, but I can answer that it is true with the Lincolnshire, Leicestershire and Bakewell breed of sheep. The inquirer also asks, if there is a demand for such wool as they produce? In answering the last inquiry, I would state that it was, sixteen years the 4th of July last, since our first importation landed in Cincinnati, and from that time to the present, we have got within from five to six cents per pound of the highest market price paid for the very finest wool that comes in the market. We have sold it as high as 56¼ cents per pound in Cincinnati, but that was when other wool was proportionately high. In respect to the profits arising from the raising of large and heavy wool sheep, I would state, that ever since our first importation, we have sold our graded wethers for five dollars in the Cincinnati market. I have driven in between twenty and thirty at a time at that price. I might here remark, that we have never turned our at-

tention particularly to sheep raising, to the exclusion of other stock and other modes of farming, or we might have had a great many more for market at one time—having a farm adapted to raising corn and grain as well as grass. I may speak further of our mode of farming hereafter; but further in respect to the profits arising from such sheep.

The spring I moved from Cheviot, Hamilton county, Ohio, (six years since,) my sheep were all of the Lincolnshire, Bakewell and Leicestershire stock. I sold my wool for 30 cents per pound, and my whole clip averaged me two dollars each. We have ewes now that are raising lambs that sheared from 6 to 8 pounds of wool each. We have a number of two year old wethers for which we feel confident of getting from six to seven dollars the coming winter, as they are much higher in the blood, and much better than those we have had for market before, having sold off our high breed for breeders. But our stock has been getting larger every year, and our whole stock of sheep are now nearly all full blooded; and having some ram lambs left unsold every year we make wethers of them, hence the improvement of wethers. For profits, we give the Lincolnshire sheep the preference before all others, believing they will produce more wool and more mutton than any other breed of sheep that can be produced, and therefore would particularly recommend them to all those who may wish to cross and improve other and inferior breeds of sheep. They add astonishingly both in size of carcass, quality and wool. We have sold a great many rams for the purpose of crossing and improving almost profitless sheep as well as good sheep; and I believe in every instance have given full satisfaction. We have sold rams from $20 to $15 each since our first importation. Although we prefer the Lincolnshire sheep, we can also speak very highly of the excellent qualities and worth of the Bakewell and Leicester sheep; but where the different kinds of sheep are raised in considerable quantities, the Lincolns will be found the largest and most profitable sheep that can be met with.

Though all our importations have been of the three kinds above mentioned, our second importation consists of some 15 or 16; a part of them were pure Lincolns, and a part were Bakewell, and the rest Leicester; and those three kind being selected in their different localities in England, were not related to each other, hence we found great advantage in crossing the different kinds with each other; but we found it necessary after a while to make a third importation,. We imported last June a year, two ewes and one ram; they were ¾ Lincoln and ¼ Leicester. The young man that had charge of them sheared them at Albany, New York, and says that there was no tag dirt on them whatever; but they were unwashed, and the three fleeces were weighed by three or four merchants in Albany, through curiosity, and all gave in the united weight of the three to be 70 pounds. The young man says that the wool of one of the sheep dragged on the ground when the sheep was walking; it was a yearling, and had not been sheared before. We weighed the ram in the fall while running with 53 ewes after the season had commenced, and he weighed 251 pounds. We have now about 50 of his lambs left, and also 60 yearlings, and a number of two or three years old, amounting altogether 237.

As your correspondent, Mr. Douglass asks for information in respect to the profits arising from the large and coarse breeds, compared with the finer breeds of sheep, we would simply recommend him to compare our statement with his own experience, in raising the fine wooled breeds of sheep, and then draw his own conclusion. I mentioned above that we have not turned our attention to sheep alone; we have Durham cattle also, and have forty head now for sale. We have pursued a general course of farming—have fatted from fifty to eighty hogs in a year, fifteen to twenty cattle, and thirty to forty sheep, and have generally from ten to fourteen head of horses on the farm, besides cutting from twenty to forty acres of wheat, twelve to twenty acres of oats, and from thirty to thirty-five acres of grass, and from one to two hundred acres in pasture. Though our stock is not as numerous as those who farm on a larger scale, we have been careful in importing the best stock to be found in England, and also in obtaining crosses suitable for such stock. We have been crossing our Durhams with Messrs Neff and Lawrence's imported Durhams the last two or three years, and have the imported bull Brutus, sold by Mr. Neff a few years back, and have several of his calves. The above stock is for sale, and will be offered at auction, the 12th of Sept.

[See advertisement in last paper.]

Our wheat crops in this county has been a great failure. There has been a great deal of wheat so ruined with rust, that it has not been cut, and hundred of acres have been harvested that are worth but very little indeed. There is but very little that is worth much, but the Mediterranean, and that is considerably inferior to the quality of the same kind of wheat last year.

Yours respectfully,
Wm. Wardall, for
Wardall & Whitehead.

Near Mount Carmel, Franklin county, Ia. }
August 4th, 1849. }

Report on Drainage.

To the Oberlin Agricultural and Horticultural Society.

Your committee on drainage report, that in our view it is a first principal of good farming that clay land must always be so drained that water shall not stand an hour on the surface at any season of the year. A clay subsoil is exceedingly impervious to water. Of course but little more will be taken in from the surface than the upper crust of soil can absorb; the rest ought to run directly off. Why? Can any reason be assigned for this doctrine—which is taught so abundantly by all experience? There are reasons.

1. A clay soil if under proper culture will take in all the water it wants for any useful purpose; and it is of no use to force it to admit more. You cannot succeed if you would, and there is no reason why you should if you could. Consequently the surplus water must stand on the surface, or in rather flat lands it will remain on the surface, till carried off by the slow process of evaporation.

2. A soil covered with surface-water cannot *breathe*. The pores of the soil are its nostrils and lungs. Cover them with surface-water and no air can enter. Atmospheric air is the vehicle of light and heat and of various fertilizing gases—all of which are essential to vegetation—scarcely less so than atmospheric air is to animal existence.

3. Surface-water by its evaporation produces cold, and our clay soils are always cold enough without its artificial addition. The amount of cold produced on the surface is very great. Under the intense heats of summer this is grateful to our feelings, as we experience it while the morning dew is being evaporated, or the fallen water of a summer shower, but our spring atmosphere does not need such a refrigeration, and this is usually the season when the unthrifty farmer's clay lands are submerged for days or even weeks.

4. Slow evaporation of water from the surface inevitably leaves it hard—nearly impervious of air. Everybody knows the fact, and everybody ought to know its mischief to the soil.

These are in our view sufficient reasons for the doctrine we have stated, in regard to drainage of clay lands.

Before we proceed to speak of the *means of draining*, it is pertinent to say that our remarks apply to a country whose surface, like our own, is nearly level, for the most part only just sufficiently undulating to carry off the water with the aid of good drains. In a clay soil alternating with sand or gravel, or broken by hills, so as often to create surface springs of water, a different sys-

tem from the one we now propose might be the best.

The suggestions we have to make will refer,

1. To *Field drainage.*

2. To *Garden drainage.*

1 Our fields may ordinarily be drained well enough, and most economically with *open drains.* Let them as far as is consistent with convenience of plowing, follow the natural water courses; and let them be *made deep and frequent enough to carry off readily all the surface-water.* This is precisely the rule, as we suppose, applicable always and every where. In new and rooty lands they must be cut with the spade; in old lands, the plow does the work for the most part sufficiently and with more economy. Almost any field, under the plow can be laid so that the water shall readily flow off in dead furrows between the "lands;" or if need be, in a ditch cut by throwing up the soil each way as if you were plowing a narrow land several times over.

These methods will suffice usually for field drainage. Such drains may need to be occasionally re-opened and cleared; the less frequently if made not with steep but with sloping banks—as in the mode of plowing last suggested.

2. In gardens covered drains are preferable, at least in part. In a country like ours where oak and other durable timber abounds, it affords the best material for their construction. Open the drain narrow, say ten to sixteen inches; as deep at least as the lower subsoil, below the range of the subsoil plow; then put in oak rails, and cover them first with cooper's shavings, and fill in with porous soil or sods; or as we have done—lay at considerable intervals along the bottom hard burnt brick-bats or small stones—upon these lay oak slabs split out in the rough of such width as to fill the width of your drain, cover with cooper's shavings, &c., as before. These drains answer an excellent purpose, and must be very durable. When our durable timber fails we must resort to the brick-kiln; and must make our inexhaustable clay beds supply the means of their own drainage. This can be readily done by burning tiles so fashioned as to fit an under layer in a drain to an upper layer, with an orific depressed or sunk in the centre through which the water can flow. The upper tile and the lower will never fit so perfectly as to prevent water from passing in, and yet the space will be so small as to preclude whatever might if admitted clog the drain. These if well burnt will outlast many generations. In laying these down, they will need be covered with porous substances, so that the surface-water can readily reach them.

In a soil full of springs, under drains will, we suppose, be found economical for field culture.

Respectfully submitted,

HENRY COWLES,
D. B. KINNEY,
HENRY SHIPHERD.

Agriculture, &c. of California.

EDS. CULTIVATOR—The following extracts are from a letter received by me from my brother-in-law, Joseph Aram, who removed to California with his family, in 1846. The portion of the letter which relates to the agricultural resources of that country, I thought might not be uninteresting to many of the readers of *The Cultivator.* The letter is dated Pueblo de San Jose, Upper California, *March 9th,* 1849. DANIEL H. WRIGHT, *Castile, Wyoming county, N. Y.*

"Can crops be raised in California without irrigation?"

Wheat, barley, corn and oats need no irrigation, they do well on the prairies; but vegetables need water though on low damp ground, they do well.

"What do grains yield per acre?"

Wheat from 25 to 75 bushels per acre; barley the same; corn from 15 to 20 bushels; oats grow spontaneously over a great portion of the country;—I have frequently seen those that would yield from 60 to 70 bushels per acre. All kinds of grain are scarce and dear.

Plowing for wheat commences in December, and we sow from that time till the first of March. Farming has been neglected on account of the mines. Wheat is worth $2 a bushel, corn $3 50, barley $5, potatoes $4 50, butter per pound $1, eggs per dozen $1, horses each, $50 to $200, mules $100 to $300. American oxen, a yoke, $200. California oxen, $100, beef cattle, each $8 to $12 00, wagons $200 to $1000. The scarcity makes the price. There is nothing cheap but beef cattle.

Lumber is worth $75 per thousand feet, very scarce at that; it has sold for more. Nails 10 cents per pound by the keg.

Monterey has about 5000 inhabitants, Puebla 2000, San Francisco 5000.

Forty-six vessels came into the port of Monterey, and eighty-four into San Francisco during the past year, but no whalers,—they are afraid to come in, for their hands would run away to the mines. The extent of the bay of Monterey is considerable—it is fifteen miles across its mouth;—the harbor is a narrow neck running into the main land; it is properly an arm of the sea. San Francisco has taken the lead the past year, being better situated for the mines.

The Spaniards depend on selling horses and cattle for their subsistence. The Americans get their living by *skinning* the Spaniards, and many have grown rich at that. The latter are very indolent, and much given to gambling.

We have a variety of fruit,—pears, the best that I ever saw; apples rather poor quality—need grafting: peaches very good; quinces most excellent; grapes are good; apricots, nectarines and figs, but not good.

The changes of the seasons are as follows: The rains commence about the first of December, and we have occasional showers from that time until the month of March; the balance of the year has no rain. But vegetation does not suffer as much as you might imagine; the soil seems adapted to the climate.

The Spaniards build altogether with *dobies* or unburnt bricks; most of the Americans build frame houses. But those dobies make a most excellent house.

Grain is always threshed immediately after it is cut—trod out by horses.

There is some very good water, and considerable very bad—the springs are good, but many of the wells are poor.

Bilious diseases are the most common.

The face of the country is mountainous, with valleys between. For agricultural purposes, the valleys are generally good, the hills and mountains are only valuable for grazing.

The people transport their produce in carts drawn by oxen, from the interior to the towns on the coast.

"What is land worth?"

The price of land is rising fast. I have a piece of land containing between three and four hundred acres, for which I paid, two years since $200, now it would bring $4000. Lots in Monterey are worth from $100 to $2000 without buildings.

Wagon timber is scarce near the coast, but in the vicinity of the mines, there is an abundance.

We have plenty of saw mills, but they are standing idle, those who tended them having gone to the mines.

The forest trees are oak, pine, red-wood, madrone, cedar, live-oak, white and red fir. The timber is confined to the hills;—the plains are generally open. I have seen abundance of red-wood timber three hundred feet high, and from 12 to 15 feet in diameter at the base.

The streams overflow in June and July, when the snow melts on the high mountains. The rains during winter rise the streams, but not to overflow.

It is about 200 miles from the coast to where the gold is found, the gold mines run north and south, parallel with the coast.

We have plenty of fish, but few fishermen. Also, deer, elk, antelope, grizly bear, and wild horses and cat-

tle. But no one stops to hunt now—except the Spaniards, who go out now and then to catch wild horses, which are becoming so valuable that it is quite an object to catch them. Cattle and hogs are as fine here as I ever saw. Our Spanish cows cannot be beat by your Durhams, only they will kick.

This would be a fine country for bees, if they could be got here; but it is somewhat singular, there are none to be found.—*Alb. Cal.*

OHIO CULTIVATOR.

COLUMBUS, OHIO, SEPTEMBER 15, 1849.

☞Behind the Time.—As was intimated in our last, this number of our paper is a few days behind its regular date, owing to the absence of the editor during the past two weeks, attending the New York State Fair and Pomological Convention, at Syracuse. A number of letters and communications, received during his absence, could not be attended to in time for this paper. His health is improved by the trip, and he promises to work with new energy for the benefit of his readers hereafter.

The Great Fair at Syracuse was all that its friends had predicted, and exceeded in interest any exhibition of the kind ever held in this country. The weather was highly favorable and the arrangements for the display were ample and complete. The number, variety and excellence of the articles and animals exhibited, and the countless thousands of delighted spectators who thronged the grounds, for three days in succession, formed such a spectacle as none could witness without emotions of the highest pleasure.

We have not time or space in this number of our paper to give any particulars respecting the Fair or other sights and doings of the past fortnight; but will give our readers some of the benefits as soon as our time permits.

The County Agricultural Fairs, in our own State, have now commenced, (see list on 1st page,) and should be well attended. We hope to be able to be present at several of them.

The Lorain County Fair was accidentally omitted in our list in last number. It occurs at Elyria on 3d and 4th of October. The Oberlin Fair, in same county, occurs on Wednesday, the 26th Sept.

The Clark and Madison Fair, at London, Oct. 3d and 4th. The Miami County Fair at Troy, Oct. 14.

Henry Colman, the well known agricultural writer, died in England last month.

The Weather has been favorable for wheat sowing, the past three weeks, in most parts of the country; and we notice many early sown fields looking quite green with the young crop, Sept. 20.

The Corn Crop is ripening finely, and bids fair to equal the highest expectations or wishes of the farmers.

The Wheat Harvest in Michigan and Illinois, we learn from personal inquiry, was less abundant than represented in the papers; and consequentty we apprehend a greater deficiency will be experienced than dealers now anticipate—hence an advance of prices of wheat and flour will probably take place. "A hint to the wise."

Bingham's Merino Sheep.—In answer to the inquiry in our last, our readers are informed that some 6 or 8 bucks from the flock of the Messrs. Bingham, of Vermont, are for sale, by John Stanley, jr., at Damascoville, Columbiana county, O. Price $15 to $30 each.

Inquiry—Leached Ashes for Potatoes.—S. H. C., of Indiana, wishes to know whether leached ashes have been fairly tried as manure for the potato crop in Ohio; if so, with what result? Will some of your readers please answer?

A Good Cow---Good Farming.

Mr. Johnston, near Geneva, had on his farm a cow which probably gives more milk than any cow in the United States. Through the month of June, 1848, she gave 42 quarts per day, which is probably without any parallel in this country. And for five successive days she gave forty-five quarts per day. From the cream only, they made fourteen pounds and a half of butter per week. Had they churned from the milk, they would have got more butter. The cow was milked three times a day. The only feed she got was grass in the pasture. She is of a roan color, half Durham and half native breed and is seven years old. She is finely formed and a handsome animal. She was raised by Mr. Johnston, who says she will be a cow of twelve years old or more. He has eight cows in his pasture of clover all fine animals, which is a pleasure to look at.

Mr. Johnston is a Scotch farmer and grazier of great celebrity, and sells many fat cattle for New York. He has a farm of three hundred and six acres in one compact body of land, on the east side of Seneca lake about three miles from Geneva, in fields of eight to ten acres, all in the best condition. One field of eighteen acres of Indian corn last year yielded eighty-three bushels of shelled corn per acre, and one field of three acres yielded ninety-one bushels and forty-five pounds per acre. Mr. Johnston drains his land by underground draining, and has some miles of earthen pipes, (made at Waterloo,) which he has been laying the last eight years. From the rich feed in his pastures the cattle are all in the best condition. He does not feed the grass down to the ground. This he calls bad farming as the roots get scorched by the summer drouth, and frozen in winter. But a covering of grass protects the roots from both and also keeps the cattle in good condition. He has large barns and yards and sheds for the cattle. In the yards the cattle make large quantities of manure—from wheat straw.—*N. Y. Jour. Com.*

Directions for Riding.—Keep your head up, chin down, chest forward, shoulders back, elbows in, hands down, back in, belly out, feet forward, thighs fixed, knees in, legs close, heels down, and toes in. Trot two hours a day without stirrups, loins loose, seat firm, hand tight, horse and rider well balanced, and then time and perseverance may make you a horseman.—*Bell's Life.*

DESIGN FOR A FARM OR COUNTRY HOUSE,

With Elevation and Ground Plans, Estimates of Expense, &c.

BY F. R. ELLIOTT, CLEVELAND.

In offering the accompanying plan for a cheap and commodious country house, I do not lay especial claim to originality in all particulars, although I do not know one exactly like it ever having been published or built.

The elevation and ground plan marked No. 1, comprise the house as I prefer it.

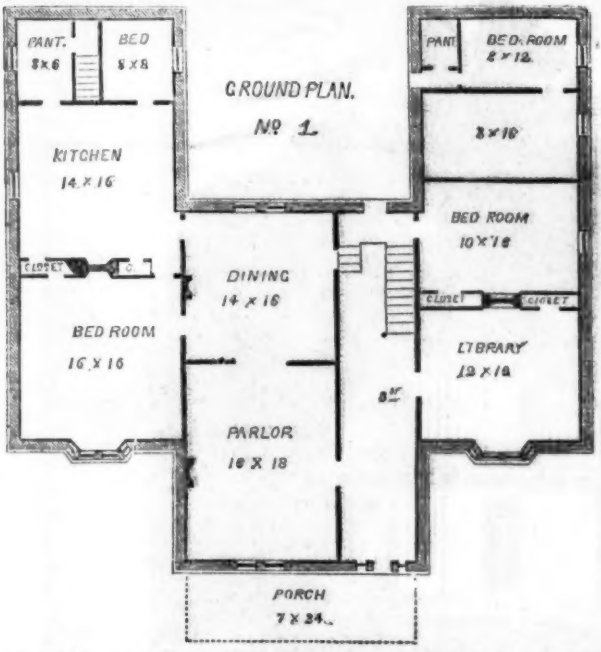
It is particularly designed to point either north or west, and should, if possible, be placed upon a slight rise of ground from the adjoining public highway or surrounding grounds.

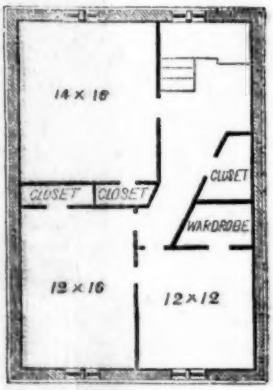
The value of land in the country, as compared with the disadvantages of basements for kitchens, etc., should not receive a thought; and while this plan may be said to cover a large area of ground, I trust to be able to show that it can be built for a much smaller amount of money than any plan of equal convenience, room and character yet published. A free circulation of air connected with large and convenient rooms, are material points, and in this they may be had. The size of cellar may be according to the wishes of the builder, but my estimate and plan is for a cellar only under the wing in which is the kitchen, that being of size sufficient to hold all vegetables, etc., that will be required for the consumption of a large family. Vegetables for stock should for easy access in feeding as well as the injurious effects sometimes resulting from a too large quantity stowed in the house cellar, always be confined to the barn cellar.

The main house is 24 by 32 feet, with 18 feet posts, and having a porch 7 feet wide in front, supported by brackets. The wings are each 16 by 40 feet, with 11 feet posts, and falling back 12 feet from the front of the main building. Of the first story front, the main building has a single pannel door, and one large window, opening each way inside upon hinges. The wings have each an oriel or bay window, projecting one foot, and having the centre lights of glass hung upon hinges to open inside. The second story front, the two windows like the one below, are divided by a heavy style, and open inside. The covering, as indicated in the elevation, is to be of inch pine boards that have been run through a planing machine, and cut to a width and thickness. These battened with half inch stuff three inches wide. As the lower story of the main building, as well as wings, are all designed to be 11 feet high in the clear, it is evident that the best length of boards will be 12 feet, as they will allow of no waste.

The estimate of cost here given is for plain, but good work. No mouldings, turnings or carvings, as all such only add to the labor of the housewife in keeping them clean, and are really no ornament, as taken in keeping with other articles usually accompanying the country.

The fire place in the parlor is designed to be carried to a level with the chamber floor, and then carried horizontally along the side of the wall until it reaches the partition of chambers, when it may rise diagonally to the centre. Some may prefer a sheet iron flue, which could like a stove pipe, be removed from the chamber during the summer months. In the elevation No. 2, the chimney rises direct. Some may prefer that, as tending to break the





SECOND FLOOR
No 1.

uniformity, which by the way, seems among architects of the present day to be more the intention in their designs than to give positions suited to the real wants of daily life.

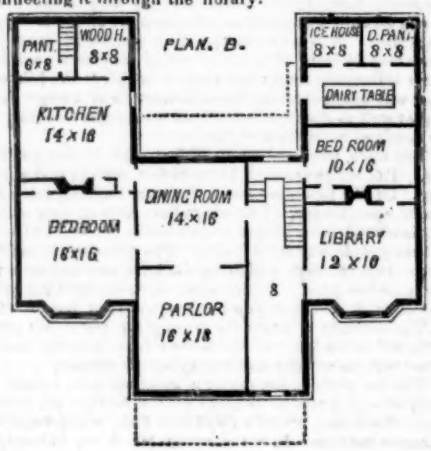
That my estimates of costs are correct, I can only say that they are such as I have contracted in building this house, (plan No. 1) and are therefore reality and no fiction or supposition.

Permit me to take you through the rooms, entering, as we should, at the main or front entrance. First, we have a hall 8 feet wide, running the entire length of the main house. From this hall, 13 feet from the rear, commence the stairs, ascending 8 feet, to a platform of 4 feet wide, where they turn, and again rise to the chambers. Upon our left, as we enter the hall, is first the parlor, 16 by 18 feet, and next adjoining it the dining room, 16 by 14. Opening from this, we have the front of wing, 16 by 16, a large bed room; and from this, as also from the dining room, are doors to kitchen, 14 by 16; a fire place in both bed room and kitchen, and connected with that in the latter, should always be built a brick oven. The dining room may be warmed by a stove, grate, or fire place, and may be carried to the chimney from the kitchen, or a hot air drum may be placed in the chamber overhead, and the heat pass that way, and so conduct on to the chimney in the centre of the main house. The pantry is shown from the kitchen, the cellar stairs, and also a small room for servants; or where no servants are kept, the latter may be left for a wood house.

The conservatory or green house in rear of the dining room may or may not be constructed, as taste and means indicate; if it is, the window should be built the same as that in front. This dining room and parlor are separated by folding doors upon hinges; as not often expected to be wanted, and as costing less than when constructed to roll or slide, the latter is, of course, preferable. The cellar is designed to be 7 feet deep, and the whole house to stand 18 inches from the ground.

A closet is seen by side of chimney in kitchen, the lower part of which is designed for kettles, etc., and the upper for crockery or china closet. The closet opening into the bed room I think should contain a bath tub, and be so arranged that warm or cold water could be received from the kitchen. Wardrobes, separately built and placed each side of the bay window would be suited to the room.

Let us now go back to the hall. On the right, just at the foot of the stairs, we enter the library, 12 by 16 feet having a fire place and a closet, as seen in the plan. In the rear of this, is again a bed room, 10 by 16, opening from the hall, and also with a fire place and closet. The rear of this I would cut off from the rest of the house by a continuous partition; and in large families, where much help is kept, a door should open from the outside into a small hall, 4 by 4, as shown, and then a bed room 8 12; and again two bed rooms 8 by 8. These furnish suitable rooms for farm laborers, and save the travel and dirt through the main hall, and so up stairs. The same also of the bed room for servants, in rear of kitchen. It is near their work, and no excuse can be offered to pass through any rooms, except to sweep them, &c. The bed room rear of library is so distant from all others, and having a fire place, as to render it suited to sickness. If desired, a passage way may be made through the closet, connecting it through the library.



For large dairies, I would construct the rear rooms, heretofore mentioned for farm laborer's bed rooms, as shown in the rough plan accompanying, marked B.

Estimate of cost.

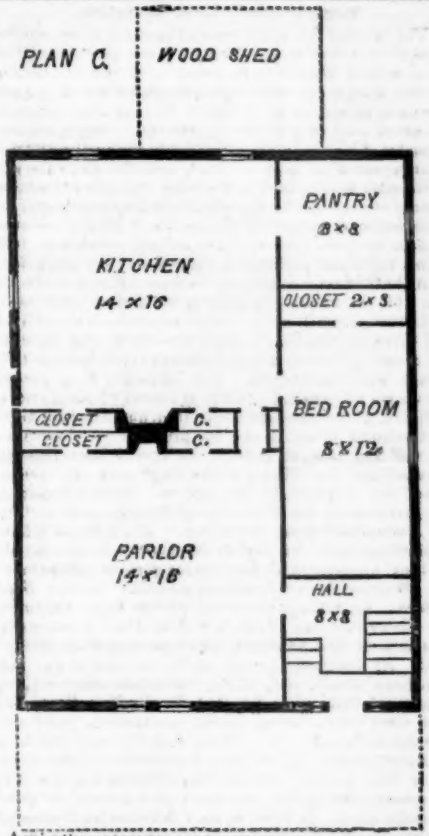
1,000 feet hewed timber, at 2c	$20 00
4,134 " inch pine boards, planed, 10½c	44 65
4,100 " roof boards, at 7c	28 70
1,200 " ½ inch for battings	12 60
500 " 1½ inch, second clear, at 13c	6 50
200 " 1¼ " " say	3 00
182 " 1½ " for water table	1 75
21,000 shingles at $2 50	52 50
968 feet, or 66 pieces, 4 by 4 scantling, 11 feet long, 320 feet, or 24 pieces, 10 feet long; 171 feet, or 8 pieces, 16 feet long; 168 feet 3 by 4, 14 feet long; 576 feet, or 32 pieces, 2 by 4, 18 feet long; 880 feet, or 80 pieces, 2 by 4, 11 feet long; 176 feet, or 16 pieces, 2 by 4, 11 feet long; 184 feet, 2 by 4, long as possible; 118 joice, 2 by 8, 16 feet long; 16 joice, 2 by 8, 10 feet long; 54 joice, 16 feet long—for ceiling joice. Estimate all the scantling at	50 00
Joiner work, to frame and enclose, make sash, &c	200 00
Glass and putty for windows	20 00
Nails	15 00
Door and window swings	10 00
	$464 70
This is exclusive of the cellar wall and underpinning, which with the chimneys, may be (inclusive of materials) made for	125 00
Flooring	20 00
Inside joiners' work and lumber	150 00
Lath and plastering	200 00
	$959 70
Extras	40 30
	$1000 00

This of course does not allow for the digging of cellar or hauling lumber,—that must be calculated according as the distance is far or near.

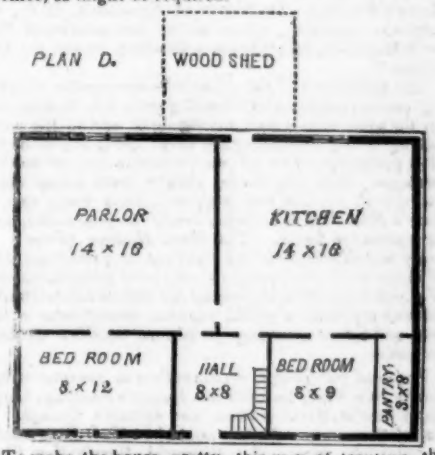
The green house is of course extra, as that does not properly belong to the house, but is a luxury which, if the house fronts to the north, could be constructed at a small expense—say thirty dollars. The front wall would of course be all required, and that should or could be done with 4 inch scantling, let into a sill of 6 by 8, boarded on each side, and filled with saw-dust or tan-bark;—the sash and roof being most of the expense.—The heat could be taken from the kitchen, if a stove was there used.

Should any person, from want of means at command, desire only to build the main house, with intention at some future day, if desirable, to add the wings, I would offer the ground plan No. C. in which the front and outward appearance of house is retained, except the wings. The stairs from hall, which will be only 8 feet square, will have two foot landings, and rise so as to bring the platform of turning directly on a level with the top of front door.

Such a house may be constructed on the plan as described, at from 5 to 600 dollars,—as lumber and labor can be obtained. The side lights of the front door would of course light the hall.



Again the entrance door, instead of being on the gable end, may be as in plan D. The hall being in centre of house, the stairs to chambers would have to be a half circle. The stairs might be reversed, and the room now 8 by 9, made 8 by 12. So *vice versa*, and then open the room to be 8 by 9 from the hall, and use it for a library or office, as might be required.



To make the house pretty, this way of fronting, the manner of finish would have to be more expensive, and a gable should be raised from the roof, and a window to correspond be introduced over the entrance door, or a projecting porch forming the hall might be constructed.

Strawberries - Best Varieties.

The interest felt at the present moment in the cultivation of this fruit is greater than it has ever been before. Evidences of this are to be found in the multitude of inquiries daily made with regard to the merits of particular sorts, as well as in the great demand that exists for plants of such as prove to be *first rate*. Soils, seasons, climates, &c., have great effect upon the quality and productiveness of all sorts of fruit, and the strawberry in particular; hence, we find the most opposite and contradictory statement and opinions, from respectable and reliable sources, respecting the merits of certain varieties. Besides the influences we have already alluded to, individual tastes and partialities, and we may add prejudices, contribute in no small degree, to these differences of opinion. On the whole, it appears to us, that cultivators are just about as much united on the question of the individual merit of varieties, as they were for a long time, on the *sexual* questions, which, fortunately, seems now to be pretty well determined. For instance: if a person, whom we will suppose entirely ignorant of the merits of varieties, wishes to make a selection, and will turn to the horticultural journals, and the proceedings of societies, he will find that, at Boston, Mr Hovey maintains that his seedlings, the "Hovey's Seedling" and the "Boston Pine," are superior to any others. From Cincinnati, the President of the Horticultural Society, says:—"*Our old Hudson still stands unrivalled.*" Mr. Elliot of Cleveland, Ohio, says: "I regard the variety known as the 'Willey' superior in all respects for general cultivation." Mr. Downing has expressed his partiality for the *Black Prince*. At Albany, the first premium was awarded, at the late exhibitions, to *Burr's New Pine*, it being pronounced the best exhibited, all its good qualities considered. At Rochester, nearly all the varieties of any note have been tested; and, if we understand correctly, the opinion of cultivators, it is that *Burr's New Pine* is the best strawberry,—being hardy, productive, good size, and fine flavored. Hovey's Seedling is a splendid, large fruit;and when a dish of them is presented, picked specimens, they usually carry off the premium; but this is by no means a test of the real value of a variety for general cultivation. In 1848, at the exhibition in Rochester, the premiums was awarded to Hovey's Seedling, as being the best *quart*,—but there were other varieties, such as *Burr's New Pine*, *Black Prince* and *Swainstone Seedling*, higher flavored and finer in quality than Hovey's; but there was not a quart of any of them, and therefore they were excluded. At the late exhibition, the first and second premiums for the best dishes were awarded to *Hovey's Seedling*. Dr. Bayne, of Alexandria, D. C., an extensive cultivator, writes in the last number of Hovey's Magazine, that "Hovey's Seedling stands yet unrivaled."

The cultivators of this place, who are capable of judging, and have tested all the leading sorts, side by side, under the same culture and management and on the same soil, agree in pronouncing the *Large Early Scarlet* as the most profitable under all the circumstances for market purposes. It is very hardy, always bears a large crop, and though not first rate in quality, finds ready sale.—*Burr's New Pine* is as large, nearly as productive, and far superior in flavor. The *Rival Hudson* (Burr's is hardy and prolific, firm and excellent for preserving. Mr. Warner of this place pronounce it a most valuable variety. We think it would be of great service to cultivators if horticultural committees would examine strawberries in the beds, and before awarding premiums, consider all their properties.

For small collections, we cannot err in recommending Burr's New Pine, Boston Pine, Hovey's Seedling, Large Early Scarlet, Rival Hudson, and Bishop's Orange. A few of the monthly Alpines might be added: for a smaller collection, we would recommend *Burr's New Pine*, *large Early Scarlet* and *Hovey's Seedling*. The Scarlet should be mixed with the others to impregnate them. It must be remembered, however, that whatever kinds be cultivated, they must have rich, deep and mellow soil.—The long continued drouth we have had here has prevented the growth of young plants, and rendered planting up to this time impossible. Recent rains, however, have brought both plants and soil to a proper state, and all through this month beds may be made—later, we would not advise. For directions in detail, we can now only refer to past volumes of the Farmer, or to other works that may be at hand.—*Gen. Far., Sept.*

How to make Strawberry Beds.

Two points must be understood, to grow the best strawberries: 1st, that the soil must be deep; and 2d, that it must be rich. If you look at the leaves of a strawberry, and because they are not very large, presume that the roots will extend but little depth, you are greatly mistaken. I have seen the roots of strawberries extend five feet down in a rich deep soil; and those plants bore a crop of fruit five times as large, and twice as handsome and good, as the common product of a soil only one foot deep.

And this reminds me of a capital instance of *Strawberry delusion*, which most of your readers doubtless know something about, but which many even yet do not perhaps fully understand. I mean the history of the "Washington Alpine Strawberry," which Mr. Stoddart, of western New York, advertised and sold a great many dollars' worth of, some four or five years ago. Mr. Stoddart, I believe was quite honest in the transaction; and yet the whole public were completely deluded by the "Washington Alpine," which was nothing but the old Alpine or monthly strawberry. The long and short of the matter was, that Mr. Stoddart had a corner of his garden which was *made ground*,—a rich deep moist soil, (I think it had been an old bog, or bit of alluvial, afterwards filled up,) not less than eight or ten feet deep. Mr. Stoddart had raised seedling Alpines, (which so far as I know, always come the same from the seed;) he had by lucky chance planted them in this corner of his garden, where the soil was so unusually rich and deep. There they grew so finely and bore such enormous crops, that his neighbors could scarcely credit their senses. The story of the miraculous crop got into the papers. People came to see with their own eyes. In short, they bought and carried away the "Washington Alpines" at extravagant prices, with the full conviction that "seeing is believing," and that such strawberries were never before grown, gazed on or tasted. Well, great was their surprise to find, on planting and cultivating the "Washington Alpines," that there was nothing new or wonderful about them; and that in fact, they all dwindled down to the old fashioned Alpine strawberry. Mr. Stoddart, naturally enough, now has as many hard names bestowed on him for the fancied deception as he had before had hard dollars for really great crops. And yet, Mr. Stoddart sold his plants in good faith, and was probably as much deluded as the buyers. The whole secret of this unheard of crops, and the large size of his fruit, lay in the depth and richness of his soil; and as none of his customers had, like him, a rich ten feet mould to grow giants in, they had no "Washington Alpines."

The "moral" your readers are to draw out of this digression is, that they cannot well make their soil too deep for the strawberry. Perhaps they cannot afford to make it three feet deep, which is the right depth for an extra fine crop; but at all events, they can make it two feet deep. And now a word as to manuring it.

It is all very well to talk about composts and "well rotted manure." The real truth is, that in our careless country, not one gardener in an hundred has such things *ready for use* at the moment he wants to prepare his strawberry patch. What people have at hand, from one end of the comutry to the other, is fresh stable or barnyard manure: and the question is, how to use that to the best advantage.

The true way to do this, is to throw out the soil where your beds are to be made two feet deep. Fill up the bottom eight inches or a foot deep with fresh stable manure mixed with the litter, treading it down firmly. Then

cover this with two-thirds of the soil thrown out, rejecting the worst part of it. This will raise the bed four inches above the surface; and as it will settle about four inches, it will be about level after it is settled.

This is all the preparation which I give my soil, and it is all that any soil of fair quality needs; only that I would much prefer to have it three feet deep than two feet and to have sixteen inches of stable manure and litter at the bottom than eight, though the latter bring heavy crops in a good soil.

You may put out your plants in August or April.*—The only difference is, that in planting in Aug., you may lose half of them by the heat and drouth, unless it is a rainy season; while in April, you are certain not to lose a single plant, unless it is unsound when you transplant it.

To my mind, there is no way of growing strawberries so complete as in beds three and a half feet wide, with three rows in each,—the plants in the rows kept clipped of their runners, and the ground between the rows nicely covered with straw all the year around. The largest and finest fruit is obtained in this way and the beds themselves will last many years; while, if they allowed to cover the bed; you can, at the most, except only two crops, and generally the fruit is of little or no value after the first crop.

It is very idle and useless to attempt to make a new strawberry plantation on old strawberry ground. You may add double the usual quantity of manure, but the soil has been so robbed of other needful elements, that you will fail in growing a healthy crop,

A word or two may also not be thrown away, respecting the choice of plants. Of course, you will always put out young runners, and not old plants; but something more than this is needful. You must take care to see that they are not runners from an old and worn out bed; for nothing is more certain than that, while runners from a fruitful bed will make fruitful plants, so also runners from an old and exhausted bed will very often produce only barren plants. Nurserymen ought to attend to this; for any respectable and intelligent nurseryman should be ashamed of sending out plants from a bed which is not in a healthy and fruitful state, since his customers at a distance depend wholly upon his integrity in sending them healthy and sound plants; not such as inherit feeble constitutions from "a long line" of decrepid ancestors. Yours, &c.,

AN OLD DIGGER.
Horticulturist.

*In Ohio, September is a better time than August.—*Ed. O. Cultivator.*

How to Manage Fruit Trees.

I have gained two pieces of information from your journal, which I consider invaluable; and as I fear some of your readers may not have been so much struck with their importance as myself, I shall venture a few words to call attention.

I alluded to the absolute necessity, in this climate, of shading the trunks of fruit trees; and the no less important fact, that the mulching the soil greatly promotes the health, and vigor, and longevity of a tree.

My eyes were first opened to the great value of *protecting the trunks* of trees, by allowing the trees to form *low heads*, as close to the ground as possible; by reading the masterly article on "Vitality and Longevity of Trees," by Professor TURNER, at page 130 of the last volume of your journal. That able correspondent proves conclusively, to my mind, (and I have by many observations since very fully verified his theory,) that just in proportion to the heat of the climate the trunk of a tree needs shelter; that in a state of nature, all trees which grow alone, and not in woods, where they are sheltered by others, put out branch near the surface, so as to hide and shelter the trunk; and finally, that all fruit trees would do the same if left to themselves, and not continually mutilated and robbed of their fairest proportions by the saw and knife of the "trimmer."

What, indeed can be more rational. A few days since we had four days successive days when the mercury in Fahrenheit's thermometer stood above 90 degrees all day long in the shade. I took the trouble to hang the glass at midday against the trunk of a peach tree in the full sunshine, when, to my surprise it rose to 130 degrees.—Now it is next to impossible that the sap-vessels should not become almost baked; and it is not a matter of the slightest surprise to me, that we find the trunk and principal branches oozing out gum, and the tree looking feeble and sickly.

Nature has fitted the upper surface of *leaves* to bear the most powerful sunshine; and the constant perspiration through this upper surface of the foliage keeps them comparatively cool. But it is not so with the bark; and if the stem of a delicate tree is exposed to those intense rays of the sun, feebleness or disease must inevitably follow.

I have had a striking proof of this truth before my eyes the past month. Bordering my garden walk are two rows of fruit trees,—each row containing six apricots and twelve peaches. They were both planted five years ago. One of these rows has been headed back, so as to keep the trees quite bushy and low,—the lower branches starting out within a few inches of the ground. (This was done to test more completely the value of the shortening in pruning, and before I knew the value of shading the roots.)

The other row has been grown in the usual way,—as standards; that is the trees have been trimmed nearly as high as one's head, so as to leave the trunk and lower branches fully exposed to the sun for a good part of the day.

The difference between these two rows of trees is a very remarkable one, even to the general observer. The low headed trees, in the first place, are unusually full of foliage; the leaves of them are large, and the shoots luxuriant; and the trees have the dark green look, which is the unmistakable sign of good health. The crop of fruit is healthy, hangs on well, and promises to be large and excellent.

The high-headed trees, whose trunks are exposed, are some few of them in excellent health; but none of them compare in richness of foliage with the low headed ones; and about two-thirds of them has a stunted and feeble appearance. Two of the peaches and three of the apricots have died with "gum;" and they all show a meagre growth, when contrasted with those in the other row.—Besides, I find, since the two "spells" of very hot weather that have occurred this summer, these bare stemmed trees are gradually shedding a considerable portion of their fruit.

To satisfy myself more completely of the positively injurious effect of the sun on the trunks of trees, and on the roots where the soil is not shaded by the spreading branches, I covered the ground beneath one of these bare stemmed trees with litter four inches thick, and bound a few handfulls of straw around the trunk, to guard it from the sun.

I find this tree more healthy than any other in the row, making luxuriant shoots, and holding its fruit well, and not appearing in the least affected by our hot or dry midsummer.

I am, therefore, a warm advocate of the practice of giving all small fruit trees *low heads*, so as completely to shade both the trunk and the roots. And I offer you the foregoing facts for the consideration of your readers.

Respectfully,
A PENNSYLVANIA SUBSCRIBER.
Horticulturist.

Thorn Hedges---The Osage Orange.

MESSRS. EDITORS.—In the June number of your valuable paper you invite correspondents, who have had experience in growing hedges to communicate the results. I have been making experiments for several years, prin-

cipally with the Osage Orange, with the most flattering success. Among the plants I have seen tried for hedging are the Cherokee Rose, the Osage Orange, the Honey Locust, the Hawthorn and the Buckthorn. The former in the States south of Tennessee, makes an excellent and highly ornamental hedge. I have tried it here, but it is too tender for this latitude. In Louisiana it forms a hedge which is impassable to the wildest animal, but the planters complain that it affords a harbor for multitudes of rats, snakes and wasps. The objection to the Honey Locust is that it is of too large a growth and difficult to be kept down. The hawthorn is devoured by insects, and soon perishes.

The Osage Orange, I consider the *beau ideal* of hedge plants. It is a native of Louisiana, and is stated to be hardy at Boston, and will undoubtedly succeed from the Gulf of Mexico to the lakes. In my opinion it would be difficult to estimate the value of this plant to the United States too highly. Englishmen have confessed to me, that they have no plant in Europe to be compared to this, for hedging purposes. I know of no plant, excepting the willow, that is more easily propagated. A piece of the root 3 or 4 inches long planted [in sandy soil] with the top a little below the surface, will produce a plant, in one season, from 2 to 6 feet high.

There is some difficulty in growing plants from the dry seeds, without preparation. If planted dry, not one in twenty will grow. When taken fresh from the half decayed ball or fruit they will grow as readily as peas. If dry, soak them a few hours in milk warm water; pour off the water and stir in fresh ashes, and let them remain moist three or four days. Then sow in drills an inch deep in rich and well prepared ground, and when the plants appear keep them clear from weeds. When you wish to plant in hedge, cut off the top two inches above the ground, take up the plants, cut off the principal roots leaving the main tap root 8 inches long. Plant in two rows from 6 to 12 inches apart, and keep the ground clean. The spring following, cut down the plants to 6 inches. The second year leave them a foot high and leave a portion of the largest shoots to be interlocked with each other. The third year leave them 2 feet, and the fourth year 4 feet high. After this you may regulate the height to suit your fancy. The hedge will then present a dense mass of shoots covered with thorns, almost as sharp as needles, and averaging a thorn for every inch in length of the branches.

I have not observed that any insect preys on this plant but Dr. White, of Ohio, informed me that the largest cocoons he had ever seen were from silk worms fed on its leaves. I have supposed, that its exemption from injury by insects was owing to the acrid milky juice, which the leaves exude. I have a hedge around my vineyard, a part of which is of four years growth. Not a plant has died out, and it presents an impenetrable mass of branches thorns and glossy leaves, which is truly beautiful. It will afford a most efficient protection to a fruit garden or vineyard, and I cannot conceive a more embarrassing situation for a vagabond, than attempting to pass through such a hedge with a fierce dog at his heels.

It is probable that the tops of the plants would be killed by the frost in New York the first winter, but that would do no permanent injury. The wood of the Osage Orange is exceedingly strong, elastic and durable, and is used by the Indians of the west for bows, whence the French name of *Bois d'Arc* by which it is known on Red River.

J. Dinsmore.

Boone county, Ky., July, 1846.

Genesee Farmer.

Let not your field or your mind lie fallow too long; they will produce a crop of weeds; and weeds are much readier to take root than to leave it.

Common sense, and common prudence, are better guides as to diet, than any positive rules.

Practical Education.

"If you do not like the present system of education why do you not point out a better one," said a friend to us the other day.

That, we propose to do at this time. It is conceded on all hands that we have no institution in the Union, where a farmer or mechanic can educate a son unless he is designed for a profession. We must therefore commence at the foundation, and build up entirely new, a system peculiar, and that will meet the wants of the present age.

At some point, away from city or village, but upon the line of railroads, and in a healthy place, purchase a farm of two or three hundred acres. Upon this farm erect plain substantial buildings, capable of accommodating five hundred students. Let the buildings contain all the modern improvements of heating and ventilation. The buildings should be so arranged that a certain number of students could board together, and professor or tutor should preside at the table with his family.

Convenient to the college buildings should be a range of workshops, furnished with as perfect a steam engine as could be built; and presiding over this department should be one of the best engineers of the country, and at the head of each of the minor branches of this department, should be a thoroughly educated mechanic, and one who could do as well as tell how and why a thing should be done in a particular manner. There should be professor of steam engine, professor of plows and harrows, and agricultural implements. Professor of carpentry and joinery and such and so many other professors as from time to time might be needed in this department. It is not intended that the various trades should be taught here, but that the student may learn the why and wherefore by practical manipulation, coupled with the lectures of the different professors.

The farm buildings should be models, and should embrace every kind needed upon a farm. The horticultural department should have a large garden with green-houses and conservatory; and be in charge of a scientific and well educated professor, who could teach and practice. The agricultural department should be as perfect as possible in all its details, and at its head should be placed the best talent in the State.

In the scientific department should be taught the modern languages, and as full and thorough a course of studies should be pursued as in the best colleges, except the Latin and Greek languages. No student should be admitted until he was well advanced in a good thorough common school education, and until he had attained the age of eighteen years at least.

The State must be at all the expense, so far as procuring the farm, erecting the buildings, fitting and furnishing the various departments in the library, apparatus, &c., and must pay all salaries. Nothing to be paid by the student but his board, and that to be so regulated as to cost as little as possible. The property of the State must educate its children, and here is to be the centre towards which all must tend, and from whence will flow out streams to irrigate the whole country. It is proper, therefore, that the State should build and sustain this institution.

We have only thus far given an outline of our plan for such an institution as will meet the wants of the producing classes of the country. That it will involve the necessary outlay of a large sum of money,—not less probably than half a million of dollars, and an annual appropriation of from thirty to fifty thousand dollars, is most true.

But while no one can be more opposed than we are, to an improvident expenditure of the public funds, no one is more decidedly hostile to those drizzling appropriations, which are lost, because they fall so far short of what economy required. If any thing is to be done, let it be done liberally and understandingly, and it will be done economically. In our next we will give our views as to the detail of the several departments.—T. C. Peters, in *Wool Grower*.

GREAT SALE OF CATTLE, &c.

THE Subscriber will sell at public sale, on Wednesday, October 3d, at his residence, half a mile south of Tremont, (Clark Co. on the valley pike, his entire stock of cattle, consisting of from 150 to 200 head, of different ages; 50 yearlings, 40 two year olds, 60 that will be four next spring, and a lot of cows and calves, one four year old Durham bull; also, horses, wagons, sheep and hogs.

Terms of sale—Three months credit; if paid down interest will be deducted. The sale to commence at 10 o'clock, A. M.

Sept. 5, 1849—2t. SILAS H. GARD.

WANTED—Black Locust Seed, Apple Seed, and Pear Seed; for which a liberal price will be paid, at the Seed Store and Agricultural Warehouse Nos. 33 and 35, lower Market Street. Cincinnati, by JOHN F. DAIR & CO.

Sept. 15—6t.

CASH FOR MUSTARD SEED.

THE HIGHEST MARKET PRICE in cash will be paid for 1000 bushels, (or less quantity) of Mustard Seed, delivered to W. MITTLEBERGER, *Cleveland, Ohio*, or to the subscribers, who request persons having seed to address them by mail immediately.

CRAWFORD & IMLACH,

Port Maitland, Niagara District, Canada West.

Aug. 15—3t.

GRANVILLE (EPISCOPAL) FEMALE SEMINARY.

THE next Session of this Institution will commence on the 30th of August next, and close on the Wednesday preceding, the 4th of July, 1850. The family as heretofore will be under the immediate charge of Rev. A. Sanford and lady. The department of instruction will be conducted by Mr, S. N. Sanford, A. M., assisted by competent female teachers.

TERMS:—For board, including tuition, fuel, lights, washing, room and use of furniture per session $110.00

Tuition for day scholars per quarter 4.50

TUITION FOR EXTRA BRANCHES,

For instruction on Piano, per quarter..... $8.00

" French, Latin and Greek, each per quarter..... 3.00

" Drawing per course, 40 lessons 5.00

" Painting in Water Colors, per course of 20 lessons 4.00

" Embroidery, " " " 2.00

July 15, 1849.

MUSTARD SEED WANTED.

I WISH to purchase a few hundred bushels of Mustard Seed, for which I will pay the highest price in cash at my Mustard Factory on Western Row, between Mason and Everett sts., Cincinnati

July 15th. R. SAVILL.

SEED STORE, AND AGRICULTURAL WAREHOUSE,

No's. 33 & 35 Lower Market Street, Cincinnati, Ohio.

For the sale of Grass, Garden and Field Seeds, Agricultural Implements,

Fruit and ornamental Trees, Evergreens, Shrubs, Bulbous Roots, Roses, Greenhouse Plants, Grape Roots, Cuttings, &c.

N. B. *A constant supply of subsoil and other plows.*

JOHN F. DAIR, & Co., Proprietors.

September 1st, 1849.

CASH and the highest market price paid for Clover, Timothy, Red Top, Mustard, Millet and Flax Seeds.

—ALSO—

Feathers, Beeswax, Ginseng and Dried Fruits, bought at market rates, at the Seed Store and Agricultural Warehouse, No's. 33 and 35, Lower Market street, Cincinnati, by

JOHN F. DAIR & Co.

September 1st, 1849.

FOR SALE.

SIX THOROUGH BRED SOUTH DOWN RAMS—Six months old—bred from Ewes selected at the New York Agricultural Fair of last year. Enquire of

JOSEPH LONGWORTH, Cincinnati.

July 2, 1849—6t.

YOUNG TREES WANTED.

20 TO 40 thousand Seedling Apple Trees of one year's growth—good even size, and *free from white aphis*.

ALSO, 2,000 Grafted Apple Trees, of approved kinds, on the root; one year grafted, and half a bushel of *Clean Apple Seeds*.

The trees to be taken up and carefully packed, as soon as the leaves fall, and forwarded to Cincinnati.

☞ Proposals to furnish either portion of the above, to be addressed to the Editor of the Ohio Cultivator, previous to the first day of October next.

Aug. 15, 1849.

MOUNT HOPE GARDEN AND NURSERIES, ROCHESTER, NEW YORK.

THE proprietors invite the attention of *Fruit Growers, Nurserymen and Dealers in Trees*, to their present stock now offered for sale. By recent large importations from Europe, and an extensive scale of propagation at home we have obtained a stock of nursery articles as complete as any in the country and we offer them to purchasers on the most liberal conditions. The well known *health, vigor and hardiness* of the trees raised here, and the undivided and scrupulous attention given to every department by the proprietors in person, offer great inducements to purchasers.

STANDARD FRUIT TREES.

Consisting of all the the best varieties of the *Apple, Pear, Plum, Cherry, Peach, &c.*, of suitable age and size for orchard planting. The principal stock is made up of the well known popular sorts, but nearly all the new American and Foreign varieties, are in our possession, and can be furnished.

PYRAMIDAL AND DWARF TREES.

Consisting of select varieties of *pears on quince, apples on paradise, and cherries on St. Lucia or Mahaleb* stocks, for gardens and limited grounds and for nurserymen, and others who wish to obtain fruit or test varieties at an early day. We have for many years given special attention to this department, and therefore believe we have probably the largest and best stock in the Union.

GOOSEBERRIES, RASPBERRIES, CURRANTS, &c.

Of these we have a large and complete assortment, and can supply them by thed dozen, 100 or 1000, very low.

The best English Gooseberries are cultivated and imported annually. All the new Currants can be supplied.

ORNAMENTAL TREES SHRUBS, ROSES, &c.

All the leading articles such as *Horse Chesnuts, Mountain Ash, Ailantus, Snowy abeles, Silver Maples, &c.*, can be furnished by the 100 or 1000, at much below ordinary rates; besides a large collection of new and rare trees, shrubs, roses, &c.

HEDGE PLANTS.

Buckthorn 2 and 3 years old.
Osage Orange, 1 and 2 years.
Honey Locust, 2 and 3 years.
Privit and other shrubs for hedging.

Evergreens, such as *Red Cedar, Norway Spruce*, Hemlock, Arborvitæ, &c can be furnished to any extent required.

STOCKS AND YOUNG WORKED TREES FOR NURSERYMEN.

Pear seedlings, 1 and 2 years transplanted.
Plum do. 2 years seedlings.
Paradise stocks for Dwarf Apples, fit for working.
St, Lucie or Mahaleb cherry for dwarfs do.
Mazzard cherry, seedlings 1 year.
Quince stocks, sort commonly used, fit for working.

Young worked trees for distant transportation can be furnished to any extent at low prices.

NEW UPRIGHT QUINCE.

A remarkably free and erect grower, making the best stock for the pear. We can now supply these in moderate quantities.

Wholesale priced list and general catalogues forwarded gratis to all post paid applications.

ELLWANGER & BARRY.

Sept. 1st. 1849.

THRESHING MACHINES.

I HAVE now finished at this place a lot of Threshing Machines, which I will sell low. They were made by a workman that has had six or seven years experience in the business in the best shops in Harrison and Belmont counties. In short they are just as good as can be made.

Nursery Trees.

I have, also, a lot of Apple, Peach and Cherry trees for sale, embracing the best varieties called for in this climate, at extraordinary low rates. Also, Isabella and Catawba Grape roots, for sale.

WM. E. LUKENS,

New Concord, Muskingum County, 15 miles east of Zanesville.

July 15, 1849.—2t.*

OSAGE ORANGE PLANTS.

WE shall have a large quantity of Osage Orange plants. Also Catawaba Grape Roots, both of this year's growing. Orders solicited at the Seed Store and Agricultural Warehouse, No's. 33 and 35, Lower market street, Cincinnati.

JOHN F. DAIR & Co., Proprietors.

Sept. 1st, 1849.

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150 THRESHING MACHINES.

THE subscribers have on hand nearly finished upwards of One Hundred

Pitt's Patent Separators.

Which, with the late improvement, are the best lot of *Machines* ever offered for sale in Ohio or elsewhere. Also,

CARY'S DOUBLE PINION AND OTHER HORSE POWERS.

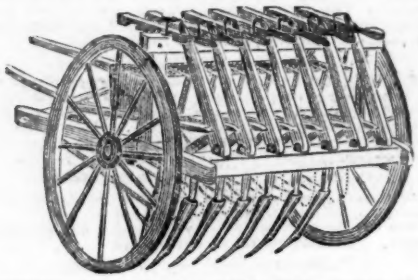
The above Machine is capable of threshing and cleaning fit for market fifty bushels of *Wheat* in an hour.

C. M. RUSSELL & CO.

Massillon, Stark Co., Ohio, April 1, 1849.

The Markets.

Prices of wheat and flour have slightly declined in the Eastern Markets since our last, owing to the news of abundant crops in Europe, &c., but we predict that an advance will take place before long. Corn, oats, seeds and provisions continue in fair demand throughout the country. We notice no important changes, and to save time we omit our usual quotations.



PENNOCK'S GRAIN AND SEED DRILL,

FOR SOWING WHEAT AND OTHER GRAIN, ALSO TURNI SEEDS, &C., IN ROWS.

THIS implement has been thoroughly tested, having been in extensive use for a number of years, especially in Chester county, Pennsylvania, where it was invented in 1844—also in Lancaster and other counties in that State, and in portions of Delaware, New Jersey, New York, Maryland and Virginia. The first premiums have been awarded for it by the Agricultural Societies of Delaware and Philadelphia, and the Franklin Institute —and an honorary Diploma by the New York State Agricultural society. A large number of highly commendatory testimonials have been given by persons who have used the machine, all showing that besides a large saving of seed, a very great increase of crop is effected by its use.

The machine is calculated for sowing seven rows of grain at once, and can be regulated for any desired quantity of seed per acre, also to run at any desired depth. It will work with ease and safety on any moderately smooth land—is easily managed; not liable to break or get out of order, and will sow from 10 to 12 acres per day with ease, by the labor of one man and two horses. It covers the seed at a uniform and proper depth, thereby ensuring its vegetation, and affording protection against "winter killing;" and by the plants standing in rows a freer circulation of air is secured during the growth of the crop, rendering it less liable to injury from rust &c.

Machines and *Rights* can be had on application to GIDEON SWAYNE, *Pittsburgh*, Pa., who is exclusive owner of the Right for the State of Ohio and Western Pennsylvania: also the counties of Brooke, Ohio, Monongahala and Preston, Va. The machine, are also kept for sale at Dayton, Ohio, by CYRUS HULL & ELIA SMITH. Price of machines $100

PETERS' BUFFALO WOOL DEPOT.

(THIRD YEAR.)

I Have established a Wool Depot upon the following plan: 1st.—The wool is thrown in 10 sorts: Merino Wool being No. 1, the grades numbering down from 1 to 5; the coarsest common wool being No. 5. Saxony wool is thrown into extra, and prime 1 and prime 2. Combing and De Laines make 2 sorts more.

2d —I charge for receiving, sorting, storing and selling, *one cent per pound*; this includes all charges at the depot, except insurance

3d.—Sales are made for cash, except when otherwise directed by owner.

☞ All wool consigned to me should be marked with the owner's name.

Warehouse, corner of Washington and Exchange streets, Buffalo, May 1, 1849. PEERT. S. C.

CATTLE FOR SALE.

140 Head of Cattle, from 2 to 4 years old, 100 fit for the butcher, for sale by the subscriber, half a mile south of Tremont, in Clark county, (on the turnpike.) I will sell part or the whole—this being the third lot I have bought and sold this spring. Persons wishing to purchase will do well to give me a call, and if I have sold I will direct them to other lots that are for sale My cattle are of good quality, in good order and in good pasture.

Tremont, O., June 21, 1849. SILAS H. GARD.

ADVERTISEMENTS suited to the character of this paper, are charged at the rate of 6 cents per line for the first, and 3 cents for each subsequent insertion.

KINDERHOOK WOOL DEPOT.

THE success of this enterprise, and the steady increase of business during the past four years, has induced the subscriber to associate with him Mr. Thomas M. Burt, as a partner in the business. The integrity and correct business habits of this gentleman are well known to many prominent men throughout the State; and for more particular information reference may be made to R. H. King, Esq., or to John T. Norton, Esq., of Albany.

With increased facilities for extending the business the enterprise will be conducted on the same principles as heretofore

1. The FLEECES will be thrown into SORTS, according to grade and quality.
2. Discrimination will be made between wool in good or bad condition.
3. All who desire it, can have their clips kept separate.
4. The sales will be made invariably for cash.
5. The charges will be, for receiving, sorting and selling, one cent per pound, and the insurance, which will be 25 c. on $100 for a term of three months.
6. Liberal advances in cash made on the usual terms.

Wool forwarded from the West and North, should be marked H. B & Co., Kinderhook, N. Y., with the initials of the owners names on each sack and shipped to East Albany.

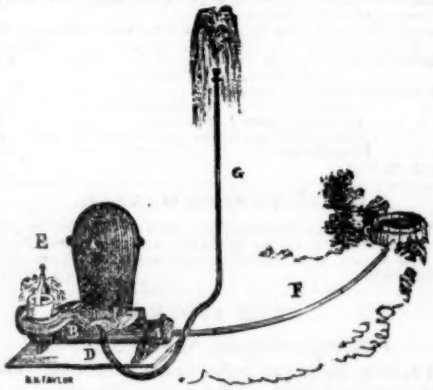
H. BLANCHARD.

Kinderhook, May 18th, 1849.

After the 1st of June the business will be conducted under the names and firm of H Blanchard & Co.

Reference can be had to

Dr. J. P. Beekman, Kinderhook, New York,
B. P. Johnson, Albany, "
L. A. Morrell, Lake Ridge, "
O. S. Curtis, Canaan, "
C. W. Hull, New Lebanon, "



Improved Hydraulic Ram.

SEVERAL of these very useful machines are for sale at the office of this paper; (also a limited supply of lead pipe,) and the subscriber will attend to the business of putting them in operation, if not too far distant from Columbus, for a moderate compensation. For particulars as to mode of operation, &c., see various articles in last year's volume of Ohio Cultivator—also, *O. Cult. Almanac*.

Columbus, June 15, 1849. M. B. BATEHAM.

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